

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A routing control system for use in a network having a plurality of nodes, said nodes including ~~a single~~ at least one master node and at least one slave node, said routing control system comprising:

a spanning tree producing portion provided in said master node ~~for which~~ producing ~~produces~~ a spanning tree of said network ~~based on the basis of~~ connection information of said network ~~and which to deliver~~ delivers said spanning tree to each slave node whenever said connection information is received;

a memorizing portion provided in each of said nodes ~~for which~~ memorizing ~~memorizes~~ said spanning tree delivered from said spanning tree producing portion as a routing table; and

a health check portion provided in each of said nodes ~~for which~~ sending ~~sends~~ said connection information to said spanning tree producing portion when a topology change of said network is detected.

2. (original): A routing control system as claimed in Claim 1, wherein said nodes are base stations each of which is connectable to a single computer by radio.

3. (original): A routing control system as claimed in Claim 1, wherein said network can be represented by a simple and undirected graph of a graph theory.

4. (currently amended): A routing control system as claimed in Claim 1, wherein said spanning tree producing portion uses ~~the~~ a Dijkstra algorithm to make said spanning tree.

5. (original): A routing control system as claimed in Claim 1, wherein said routing table includes a node number column for said nodes, a port number column for respective nodes, an IP address column for adjacent nodes, an IP address column for respective nodes, a cost column and a connection/disconnection information column.

6. (currently amended): A routing control system as claimed in Claim 1, wherein said health check portion detects fault between the node thereof and an adjacent node directly connected to the node thereof ~~with and referring~~ refers to said routing table memorized in said memorizing portion of the node thereof to detect said topology change of said network.

7. (currently amended): A routing control system as claimed in Claim 6, wherein said health check portion of any slave node ~~transmitting~~ transmits a message signal to said health check portion of said master node when the fault is detected;

wherein

——said health check portion of said master node broadcasts a request signal on said network when said message signal is received; and

wherein said health check portion of each slave node ~~sending~~ sends said connection information to said spanning tree producing portion in response to said request signal.

8. (currently amended): A routing control system as claimed in Claim 1, wherein said health check portion detects that an additional node is directly connected to the node thereof ~~with and referring~~ refers to said routing table memorized in said memorizing portion of the node thereof to detect said topology change of said network.

9. (currently amended): A routing control system as claimed in Claim 8, wherein said health check portion of any slave node ~~transmitting~~ transmits a message signal to said health check portion of said master node when the additional node is detected;

wherein ——said health check portion of said master node broadcasts a request signal on said network when said message signal is received; and

wherein said health check portion of each slave node ~~sending~~ sends said connection information to said spanning tree producing portion in response to said request signal.

10. (currently amended): A routing control system as claimed in Claim 9,
wherein said health check portion of each slave node ~~having~~comprises a plurality of ports
directly connected to adjacent nodes;; and

wherein said health check portion of each slave node receives said request signal at one
of ports and transmits it from the remaining ports to said adjacent nodes.

11. (currently amended): A routing control system as claimed in Claim 10,
wherein said request signal ~~including~~includes an ID number;; and

wherein said health check portion refers to said ID number and discards said request
signal ~~with referring to said ID number~~ when it said health check portion has already received
~~the same~~ a request signal including an identical ID number.

12. (original): A routing control system as claimed in Claim 9, wherein said
health check portion memorizes a port number of said port receiving said request signal to
produce said connection information.

13. (original): A routing control system as claimed in Claim 1, wherein said
health check portion compares said routing table of the node thereof with that of an adjacent
node directly connected to the node thereof to put said routing table into a newer state.

14. (currently amended): A routing controller for use in a node of a network comprising:

a spanning tree producing portion ~~for which producing~~ produces a spanning tree of said network ~~based on the basis of~~ connection information of said network ~~to~~ and which delivers said spanning tree to each node of said network whenever said connection information is received;

a memorizing portion connected to said spanning tree producing portion ~~for which memorizing~~ memorizes said spanning tree as a routing table; and

a health check portion connected to said spanning tree producing portion ~~for which supplying~~ supplies said connection information of said network when a topology change of said network is detected.

15. (original): A routing controller as claimed in Claim 14, wherein said node is a base station connectable to a single computer by radio.

16. (original): A routing controller as claimed in Claim 14, wherein said network can be represented by a simple and undirected graph of a graph theory.

17. (currently amended): A routing controller as claimed in Claim 14, wherein said spanning tree producing portion uses ~~the~~ a Dijkstra algorithm to make said spanning tree.

18. (currently amended): A method of controlling a routing table used in a network having a plurality of nodes, said nodes including ~~a single~~ at least one master node and at least one slave node, comprising ~~the steps of:~~

producing, at said master node, a spanning tree of said network ~~on the basis of~~ based on connection information of said network ~~to and which deliver~~ and which delivers said spanning tree to each slave node whenever said connection information is received;

memorizing, at each of said nodes, said spanning tree delivered from said spanning tree producing portion as a routing table; and

sending, from a health check portion of any one of nodes, said connection information to said spanning tree producing portion when a topology change of said network is detected.

19. (currently amended): A method as claimed in Claim 18, wherein said method further comprising ~~the step of:~~

comparing, by said health check portion, said routing table of the node thereof, with that of an adjacent node directly connected to the node thereof to put said routing table into a newer state.